

**In The United States Patent and Trademark Office
On Appeal From The Examiner To The Board
of Patent Appeals and Interferences**

In re Application of: Brad K. Fayette
Serial No. 09/972,568
Filing Date: October 5, 2001
Confirmation No. 5350
Group Art Unit: 2151
Examiner: Kamal B. Divecha
Title: Method and System for Communicating Among Heterogeneous Systems

Mail Stop: Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Reply Brief

Appellant respectfully submits this Reply Brief under 37 C.F.R. § 41.41(a)(1) in response to the Examiner's Answer electronically sent October 31, 2007.

Argument

Appellant respectfully presents the following arguments in response to the “Response to Argument” section on pages 10-22 of the Examiner’s Answer. For the reasons below and those presented in the Appeal Brief, Appellant respectfully requests allowance of all pending claims.

I. The Examiner’s Section 112 Rejection is Improper

The Examiner has rejected Claims 1-5, 11-17, and 20-22 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. As noted in the Appeal Brief, Appellant asserts that the present application supports the claim language at issue regarding the truncation of the header (or lack thereof) in the description associated with Figure 4 of the application (e.g., paragraphs 26-31). Again, as an example, Appellant believes that it is clear from this description that the header is truncated if it is larger than the allocated memory space for the legacy protocol header (e.g., see paragraph 30). Also, Appellant submits that it is easily understood from this description that the header is not truncated if it fits within the allocated memory space (e.g., if a machine implementing a legacy protocol receives a message having a legacy header). *See, e.g.*, paragraph 23. For these reasons, Appellant respectfully requests that the Board reverse the Examiner’s rejection of these claims under Section 112.

II. The Examiner’s *Denny-Birdwell* Rejection of Claims 1, 2, 4, 5, 11-14, 15, 16, and 20-22 is Improper

The Examiner has rejected Claims 1, 2, 4, 5, 11-14, 15, 16 and 20-22 under 35 U.S.C. § 103(a) as being unpatentable over *Denny* in view of *Birdwell*. In the “Response to Argument” section of the Examiner’s Answer, the Examiner addresses several arguments present by Appellant in his Appeal Brief. Appellant will, in turn, address the Examiner’s comments below.

The Examiner first addresses (on pages 12-15 of the Answer) Appellant’s argument that *Denny* does not disclose a “fixed header length” since it discloses a header (prefix) that

has both a fixed portion and an extended portion of variable size. Although the Examiner is correct that *Denny* suggests that the extended portion of the prefix may not always be present, Appellant's point is that the Examiner's use of *Denny* to disclose the "allocating" limitation of the claims (as discussed below) relies on the disclosure in *Denny* of what actions are taken with respect to the variable extended portion of the header. Thus, as is discussed further below, if the Examiner equates the length of the "fixed prefix" of *Denny* as the "fixed header length," then *Denny* clearly does not disclose the claimed allocating limitation.

Furthermore, regarding the "fixed header length" limitation, the Examiner also highlights (on page 16 of the Answer) the fact that the Appellant has admitted that the Background section of *Denny* discloses a fixed header length. However, Appellant is not asserting that a fixed header length alone is novel, instead it is this limitation in association with the other limitations of the claims (such as the "allocating" and "truncating" limitations) that is novel. Appellant is merely trying to show that the Examiner is attempting to "have his cake and eat it to" by using narrowly defining the "prefix" of *Denny* to be just the fixed portion in order to show a disclosure of the claimed "fixed header length", and then redefining what the prefix is when using another portion of *Denny* (the dynamic allocation of memory for the entire prefix, including the variable extended portion) to ostensibly disclose the claimed allocating limitations.

That leads us to the discussion of what *Denny* does disclose about allocating memory for a header. On page 17 of his Answer, the Examiner refers to Column 2, lines 47-60 of *Denny* as a disclosure of the claimed "allocating a memory portion from the computer memory, said memory portion having a depth corresponding to said fixed legacy header length." However, as noted in the portion quoted by the Examiner, *Denny* describes a means for determining the size of the prefix and a means to establish the capacity of the input buffer to be at least equal to the size of the prefix. This description is clearly referring to what is later described in step 70 of Figure 4 as the dynamic allocation of memory to accommodate varying extended prefix sizes, which the Examiner make pains earlier in his Answer to point out is *not* performed when no extended prefix present. This only makes sense since there would be no need to determine the size of the prefix if only a fixed length prefix was present. Thus, the Examiner is referring to a portion of *Denny* that describes what happens when a

variable length extended prefix is present (i.e., memory is allocated to accommodate whatever size the prefix is determined to be) while at the same time choosing to focus on an example in *Denny* that completely skips this allocating step (step 70 of Figure 4) when no extended prefix is present for the purposes of asserting that *Denny* discloses a “fixed length header.”

The bottom line is that *Denny* specifically discloses that the memory used to store an incoming message is expanded as necessary to accommodate the size of the *entire* prefix – both the fixed and variable portions. *See* Col. 7, lines 20-33. For example, *Denny* specifically states that “If the capacity of the input data buffer is insufficient to hold the prefixes 42, 44 of the message 40,” the system allocates additional memory to store the message. *Column 7, lines 27-31*. Therefore, *Denny* does not allocate a memory portion corresponding to a *fixed* header length, instead it *dynamically* allocates a memory portion to accommodate a *variable* header length. While *Denny* may disclose a fixed header length, the fixed header length alone is *not* what determines the amount of memory that is allocated.

Furthermore, the Examiner appears to be arguing on pages 17-18 of the Answer that although there is no disclosure in *Denny* of what memory allocation is performed when no extended prefix is received (i.e., the flow of Figure 4 skips over the allocation step), there must be some memory allocated that has a depth “corresponding to said fixed legacy header length.” While Appellant agrees that there inherently must be some memory available to receive the fixed prefix, this does not mean that the depth of this memory is allocated to corresponds to the fixed legacy header length, as required by the claims. This brings us to the discussion of what is the meaning of “corresponding to said fixed legacy header length.”

The Examiner has asserted on page 19 of his Answer that “said memory portion having a depth corresponding to said fixed legacy header length” should be interpreted as meaning that the memory portion has a depth *at least* equal to the fixed legacy header length. Appellant respectfully submits that this is an incorrect interpretation of the quoted claim language, both based on its plain meaning and based on the broadest reasonable interpretation of the claim in light of the specification. On page 19 of his Answer, the Examiner cited to paragraphs 28 and 30 of the present application as supporting his interpretation and allegedly

disproving Appellant's interpretation that "corresponding to" means "matching." However, these paragraphs clearly support Appellant's position. Specifically, paragraph 28 includes the following (emphasis added):

Since the sending machine 110 and receiving machine 140 share a common legacy version of the stateless protocol, the receiving machine 140 expects a message and header of a known length and can allocate a memory 206 of a corresponding depth for receiving the message or *specifically for the header*. If the receiving machine 140 expects to receive the same fixed format header as that which was sent by the sending machine 110, the length of the message and header received by receiving machine 140 *matches the size of the memory* 206 or stacks allocated by the stateless protocol implemented on the receiving machine 140.

Furthermore, paragraph 28 describes the following (emphasis added):

A receiving machine 140 having a legacy version of the stateless protocol can interpret a received message having an upgraded header. The receiving machine 140 expects to receive a message and header of a length set by the legacy format and allocates a memory or stack of corresponding depth. For example, when the receiving machine 140 receives a message, such as {3, 2, a, b, c, d, 1} [used earlier in the application as an example of an upgraded header], the message and header are added to the memory 206 first, and then are followed by the header. *Since the memory 206 has been allocated only sufficient storage space for {a, b, c, d, 1} [used earlier in the application as an example of a legacy header] according to the legacy protocol 208, additional parameters of the upgraded header can be stripped off or ignored and the header becomes truncated or flattened. Thus, the parameters {3, 2} provided by the upgraded protocol 209 can be dropped because the memory has become occupied by the legacy protocol 208 which proceeded it.*

Appellant submits that these paragraphs clearly support Appellant's interpretation that "corresponding to said fixed legacy header length" means matching the fixed legacy header length. Furthermore, this interpretation is further supported by the following "truncation" limitation of the claims, while the Examiner's interpretation makes no sense in light of this "truncation" limitation.

Finally, because *Denny* discloses allocating a memory portion to accommodate a *variable* header length (so that the entire fixed and extended prefix portions can be stored), *Denny* necessarily does not disclose that a portion of the message is truncated if it is greater

that the “depth of the memory portion.” Instead, *Denny* discloses that the memory is increased as necessary to accommodate the message. For this reason, there is simply no motivation to combine a teaching from any reference that discloses truncating a message that is greater than a memory depth with the teachings of *Denny*. This is the opposite of what is done in *Denny*. The Examiner’s Answer does not address Appellant’s Appeal Brief argument that it would not be obvious to take portions of two opposite alternatives (expanding memory to fit a variable header size vs. truncating a variable header size to fit a fixed memory size) and meld them together, as the Examiner tries to do in combining *Denny* and *Birdwell*. The two alternatives work towards opposite goals and thus actually teach away from the combination of any sort of truncation with the teachings of *Denny*. Not only is there not a motivation to combine (since there is nothing in the references suggesting that header truncation could be used in the invention of *Denny*), there is actually a motivation *not* to combine the references and *Denny* would be rendered inoperable for its stated purpose by such an attempted combination. Appellant respectfully submits that “motivation to combine” analysis provided in the Examiner’s Answer is clearly based on hindsight and uses as the motivation the very advantages of particular embodiments of the present invention. Furthermore, the Examiner has been unable to explain, and cannot explain, how truncation could ever be used in *Denny* due to its teaching away from truncation and the inoperability of *Denny* if such a combination was attempted. Therefore, Appellant respectfully submits that the Examiner has not met his burden.

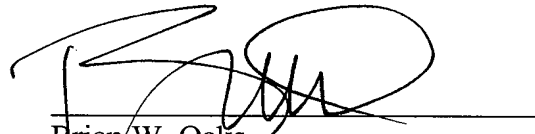
For at least these reasons, Appellant respectfully requests allowance of Claims 1, 11, 15 and 20, as well as the claims that depend from these independent claims.

Conclusion

Appellant has demonstrated that the present invention, as claimed, complies with all statutory requirements for a U.S. Patent. Therefore, Appellant respectfully requests the Board to reverse the final rejection of the Examiner and instruct the Examiner to issue a Notice of Allowance with respect to all pending claims.

Appellant believes no fees are due. Nonetheless, the Commissioner is hereby authorized to charge any fee and credit any overpayment to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,
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